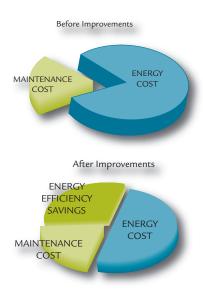


### **Energy Management Services**

Energy Management Services (EMS), *a form of energy savings performance contracting*, is an alternative method that cities and towns may use to implement projects that save energy and water.

- \* EMS allows a design-build process that provides continuity in the conceptualization, engineering & design, construction, and monitoring
- Once a contract is awarded it allows the project to proceed from design to closeout without further public bidding
- ♦ Improvements are paid for by guaranteed energy and water savings



EMS is a way to make investments in new energy-efficient equipment. You can make the upgrades you need now - with no upfront capital - and pay for them later through the energy and water savings that result. You benefit by getting new equipment, expertise from energy service professionals, ongoing maintenance services and the ability to accomplish many projects all at once. Best of all, these savings are guaranteed.

HERE IS HOW IT WORKS: You enter into an agreement with a private energy service company (ESCO). The ESCO will identify and evaluate energy-saving opportunities and then recommend and install a package of improvements to be paid for through savings. The ESCO will guarantee that savings meet or exceed annual payments to cover all project costs - usually over a contract term of seven to ten years. If savings do not materialize, the ESCO pays the difference, not you.

#### Five steps to a successful project:

- 1. Decide if energy performance contracting is a good solution for you
- 2. Select an Energy Service Company (ESCO)
- 3. Contract with your ESCO
- 4. Negotiate a long-term contract with your ESCO
- 5. Verify savings and enjoy the benefits

**STEP 1**: Your first step is to consider how a performance contract would work for you. You will want to look at your facility needs, current staff capabilities, and your potential to make improvements. Performance Contracting may benefit you if you have:

More that 40,000 square feet of floor area;	Scarce budget resources;
Spend more that \$40,000 annually on energy costs;	Too little energy management expertise;
Aging buildings or equipment;	Too many demands on your maintenance staff;
Recurring maintenance problems or high maintenance costs;	No recent upgrades of your lighting or controls systems;
Comfort complaints;	Energy-using equipment that is ready for replacement.

### STEP 2: The ESCO will be your partner for a long time, so it is important to select one that shares your vision and is able to meet your needs. The Energy Service Company can:

Identify and evaluate energy saving opportunities;	Order and install equipment;
Provide engineering services from design to equipment specifications;	Manage construction of a wide variety of projects;
Provide long-term energy management and maintenance services;	Guarantee performance and savings; and

# **STEP 3:** The ESCO will perform an investment-grade energy audit that identifies energy-saving opportunities and evaluates their potential. Projects pay for themselves. Typically, any energy conservation measure that either saves energy or water or produces on-site electricity from new renewable sources qualifies for the project.

Heating: Replace aging boilers, steam traps and pumps.	Controls: Install a new energy management control system or improve operational strategies.
Cooling: Replace aging chillers, cooling towers or pumps.	Lighting: Replace lamps and ballasts or entire fixtures.
Ventilation and Distribution: Install variable speed fans or replace fan or pump motors.	Water: Install low-flow fixtures.

**STEP 4**: An energy performance contract is your road map for implementing and tracking the project over the term of the agreement. It should clearly define roles and responsibilities and explicitly state how savings are determined and how the guarantee will function.

## **STEP 5:** Follow-up monitoring helps ensure that you are getting full value from your energy performance contract. The success of the monitoring effort depends on the level of detail provided in the energy performance contract. Verify the Savings:

Approve the installation.	Operate the building as agreed in the contract.
Maximize benefits through trained staff.	Review the quarterly reports .

#### How DOER CAN HELP:

- ❖ Provide a guide and model RFP and contract documents
- Provide guidance on the procurement process for chapter 25A, sections 11C and 11I
- Review bid documents
- \* Provide education, workshops, and presentations

### FOR MORE INFORMATION CONTACT

EILEEN MCHUGH
Department of Energy Resources
617-626-7305
Eileen.mchugh@state.ma.us

